glabrous pedicels. . . ." But under the latter species he accepts as valid a var. *asiatica* Ohwi with spikelets only 1.5—1.9 mm. long. I have seen no spikelets as large as 2.5 mm. among the 57 sheets of *D. Ischaemum* examined, nor are the pedicels always glabrous, but commonly variously scabrous or puberulent at summit or throughout. In *D. violascens*, according to Henrard, the spikelets are "scarcely 2 mm. long, mostly 1.6—1.8 mm. . . . with scabrous pedicels." The range in spikelet size for the 31 specimens examined was 1.3—1.8 mm., as stated in the key, and the pedicels are variously scabrous or puberulent as in *D. Ischaemum*. In Hitchcock's *Manual*, *D. Ischaemum* is keyed as having spikelets 2 mm. long, 1 mm. wide, the hairs "or most of them" capitellate, while *D. floridana* Hitchcock and *D. violascens* are separated on the basis of spikelets 1.5 to 1.7 mm. long, about 0.6 mm. wide, the hairs not capitellate. The two latter are then differentiated as "Sterile lemma with 5 distinct nerves; spikelets sparingly pubescent, 1.7 mm. long" (but in the description stated to be 1.5 to 1.7 mm.); "fertile lemma light brown; racemes, if more than 2, not digitate" for *D. floridana*, "Sterile lemma with 3 distinct nerves; spikelets distinctly pubescent, 1.5 mm. long; fertile lemma dark brown, racemes usually all digitate" for *D. violascens*. For the 31 sheets of *D. violascens* examined, none of these characters will stand up. Henrard, who saw fragments of the type and only known collection of *D. floridana* (from Hernando Co., Florida), adds that it shows only non-verrucose hairs, and refers it to still another section of the genus. I strongly suspect that *D. floridana* is merely a form of *D. violascens* in which the non-verrucose hairs, conceded by Henrard himself to be present with the verrucose ones, are the predominant or exclusive type.

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CHROMOSOMES OF TWO MORAEA (IRIDACEAE) FROM SOUTHERN AFRICA.—A new basic number of $x=6$ in *Moraea* has recently been reported for 2 South African species by Riley (Canad. J. Genet. & Cytol. 4: 50-55, 1962). Two additional species can now be assigned to this line.

M. erici-rosenii Fries — $n=6$, $2n=12$ (from 6 plants). N. RHODESIA: Mwinilunga Dist., Zambesi River rapids, 4 miles N of Kalene mission, 10 Nov. 1962, *Lewis 6224* (K, US, MO). "Collected at the base of massive granite outcrops among islands of grasses and sedges in black, shallow, wet soil; almost indistinguishable among other monocots until tepals open daily at 4 p.m. till dark." The species has been found sporadically throughout southern Africa, but its rarity can be at least partially attributed to late afternoon flowering for at other times of the day plants are very difficult to locate. Mitotic chromosomes from untreated cells

of immature flower buds have submedian to subterminal centromeres and vary from 10.3 μ for the shortest pair to 18.2 μ for the longest pair.

M. setacea Ker. — $2n=12$ (from 2 plants). S. AFRICA: Natal, Hlabisa Dist., Charters Creek, 5 Dec. 1962, *Lewis 6306* (K, US, MO). 'Sloping grass field in sandy soil just above ocean.' The chromosomes found in untreated root-tip cells are comparable with those of *M. erici-rosenii*, viz., submedian and subterminal ranging from 10.8-19.9 μ in length.

On measuring the chromosomes from pretreated cells of *M. polystachya* illustrated by Riley, I estimate their lengths to vary from 12.1-15.4 μ while the chromosomes of *M. spathulata* appear to be only about one-half as long. Riley noted that the chromosomes of *M. polystachya* had subterminal and submedian centromeres. Thus in both chromosome length and centromere position the chromosomes of *M. polystachya* are similar to those of *M. erici-rosenii* and *M. setacea*.

Plants from both collections are in cultivation at the Royal Botanic Gardens, Kew. I appreciate the help of Mrs. Susan Holmes of Kew in determining these species.—*Walter H. Lewis, Missouri Botanical Garden, and Department of Botany, Washington University, St. Louis, Missouri.*

ERIOGONUM ANNUUM (POLYGONACEAE) BIENNIAL IN NEBRASKA. The life-form of *Eriogonum annuum*, occurring in the United States from North Dakota and Montana south to Texas and New Mexico, is commonly described as therophyte (annual). I have observed this species over a two year period in Holt and McPherson counties, Nebraska, where it behaves as a typical biennial. Its seeds germinate in the spring, and a rosette is produced. The rosette overwinters, and the following year a leafy, flowering shoot develops, seeds are matured, and the plant dies. At least in parts of Nebraska, then, *Eriogonum annuum* is not a therophyte but is a hemicryptophyte of the semi-rosette type. —*John W. Thieret, University of Southwestern Louisiana, Lafayette.*

A DECEIVING AQUATIC NEPTUNIA (LEGUMINOSAE) IN CENTRAL AMERICA.—*Neptunia prostrata* is a distinctive and fantastic species, particularly as one would scarcely expect to find a strictly aquatic plant among the Mimoseae. The prostrate stems, lying just below the surface in warm pools, are jointed and spongy-thickened, white (one might use Vachel Lindsay's term "fish-belly white"), soft and fleshy, reminding one of a great worm; the leaves are held up in the air and are sensitive, folding when touched; the flowers resemble those of *Mimosa*. It is rather unexpected, then, to find another species of *Neptunia*, usually terrestrial, invading the water and so closely simulating *N. prostrata* as to masquerade frequently under that name in the herbarium.

NEPTUNIA PLENA (L.) Bentham f. **lumbricoides** Fassett, f. nov. Planta aquatica caulibus incrassatis spongiosis prostratis submersis, eis *N. prostratae* simulantibus. EL SALVADOR: Dept. La Paz, floating in Laguna Nahualapa, 6 km. S.W. of El Rosario de la Paz, *Fassett 28323*,